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## ENUMERANTUR PLANTAE DAKOTAE SEPTENTRIONALIS VASCULARES.—III.

ENUMERAVIT J. LUNELL.

### The Vascular Plants of North Dakota.—III.

With Notes by J. Lunell.

Family 14. **CYPERACEAE** J. St. Hilaire Expos. Fam. I: 62. (1805).

*CYPERUS* Hom. Odyss. XXI: 391. Hippoc. vie acut. 409. Theophr. Hort. IV: 11., also *Schoenus* of same. Diosc. I: 4, Theoc. loc. comm. *Zerna* Pseud. Democ. in Geopon. XII: 6. *Juncus Cyperus dictus* Plinius XXI: 79 = *Cyperus rotundus* Linn. and almost all other writers. *Cyperus* Linn. Sp. Pl. 44. (1753).

189. *Cyperus Schweinitzii* Torr. Ann. Lyc. N. Y. 3: 276 (1836)  
Pleasant Lake; Denbigh (Bergman).

190. *Cyperus acuminatus* Torr. et Hook. Ann. Lyc. N. Y. 3: 435. (1836).

Leeds (extinct); Fargo (O. A. Stevens).

191. *Cyperus erythrorhizos* Muhl. Gram. 20. (1817).  
Jamestown.

*ELEOCHARIS* R. Br. Prod. Fl. Nov. Holl. I: 224. (1810).

192. *Eleocharis quadrangulata* (Michx.) R. et S. Syst. 2: 155. (1817).

*Scirpus quadrangulatus* Michx. Fl. Bor. Am. I: 30. (1803).

*Eleocharis mutata* Britton, not R. et S.

Benson Co., acc. to specimen deposited in the Gray Herbarium by the writer in 1906.

193. *Eleocharis olivacea* Torr. Ann. Lyc. N. Y. 3: 300. (1836)?

Benson Co., acc. to specimen deposited in the Gray Herbarium by the writer in 1906.

194. **Eleocharis ovata** (Roth.) R. et S. Syst. 2: 152. (1817).  
*Scirpus ovatus* Roth. Catal. Bot. I: 5. (1797).  
*Eleocharis monticola leviseta* Fernald.  
 Leeds, Butte.
195. **Eleocharis palustris** (Linn.) R. et S. Syst. 2: 151 (1817).  
*Scirpus palustris* Linn. Sp. Pl. 47. (1753).  
 Leeds, Butte.
196. **Eleocharis palustris** var. **vigens** Bailey; Britton, Journ. N. Y. Micros. Soc. 5: 104. (1889).  
 Leeds, Oberon.
197. **Eleocharis glaucescens** Willd. Enum. 76. (1809).  
 Leeds, Butte.
198. **Eleocharis acicularis** (Linn.) R. et S. Syst. 2: 154. (1817).  
*Scirpus acicularis* Linn. Sp. Pl. 48. (1753).  
 Leeds, Pleasant Lake.
199. **Eleocharis Wolfii** A. Gray, Britton Journ. N. Y. Micros. Soc. 5: 105. (1889).  
*Scirpus Wolfii* A. Gray, Proc. Am. Acad. 10: 77. (1874).  
 Fargo (O. A. Stevens).
200. **Eleocharis acuminata** (Muhl.) Nees. Linnaea 9: 294. (1835).  
*Scirpus acuminatus* Muhl. Gram. 27. (1817).  
*Eleocharis compressa* Sulliv. Am. Journ. Sci. 42: 50. (1842).  
 Leeds, Pleasant Lake.  
*SCIRPUS* Tragus, Stirp. Com. p. 684. (1552).  
*Scirpus* Tour. Élem. Bor. 420. (1694).  
*Scirpus* Linn. Sp. Pl. 47. (1753).
201. **Scirpus subterminalis** Torr. Fl. U. S. I: 47. (1824).  
 Benson Co., acc. to specimen deposited in the Gray Herbarium by the writer in 1906.
202. **Scirpus americanus** Pers. Syn. I: 68. (1805).  
*Scirpus pungens* Vahl. Enum. 2: 255. (1806).  
 Leeds.
203. **Scirpus americanus longispicatus** Britton, Trans. N. Y. Acad. Sci. II: 78. (1892).  
 Shores of Devils Lake.
204. **Scirpus solispicatus** Lunell, sp. nov.  
 Spicula assidue solitaria, parva. Alioqui *S. americano* consimilis.  
 Spikelet constantly solitary, small. Otherwise as *S. americanus*.  
 Butte.

205. **Scirpus validus** Vahl. Enum. 2: 268. (1806).  
Leeds, Turtle Mountains.
206. **Scirpus occidentalis** (Wats.) Chase, Rhodora, vol. 6,  
p. 68. (1904).  
Leeds.
207. **Scirpus brittonianus** Piper. Contr. U. S. Nat. Herb. 11:  
157. (1906).  
*Scirpus campestris*  
Butte, Dunsieith.
208. **Scirpus fluviatilis** (Torr.) A. Gray. Man. 527. (1848).  
*Scirpus maritimus* var. *fluviatilis* Torr. Ann. Lyc. N. Y. 3:  
324. (1836). Leeds.
209. **Scirpus rubrotinctus** Fernald, Rhodora (1900). 20.  
Pleasant Lake.
210. **Scirpus atrovirens** Muhl. Gram. 43. (1817).  
Butte, Dunsieith.
- ERIOPHORUM** Linn. Syst. (1735), Gen. 22. (1737), Sp. Pl.  
52. (1753).  
*Linagrostis* Tour. I. R. H. App. 664 (1708), also *Linagrostis*  
Tabernaemont. Hort. 559. (1613). *Plumaria* Heister. Syst. 12.  
(1748)! Gramen Eriophorum Dodonaeus. 'Tabernaemontanus'  
name is the oldest, but Bubani does not like it, because of deri-  
vation, and the writer takes the stand with him.
211. **Eriophorum angustifolium maius** Schultz.  
Butte, Towner.
- RYNCHOSPORA** Vahl. Enum. 2: 229. (1806).  
Holoschoenus Theophr. appears to be *Schoenus Mariscus*  
Linn. and of the Greeks = *Juncus acutus*. *Schoenus leia* Diosc. =  
*Scirpus Holoschoenus* L. *Schoenus Enosmus* Diosc. = *Andropogon*  
*schoenanthus*. *Schoenus* of greeks is therefore rather undefinable  
and may be held as equivalent of *Juncus effusus* L. or *Scirpus*  
*lacustris* L.
212. **Rynchospora capillacea** Torr. Comp. 41. (1826); A.  
Gray, Ann. Lyc. N. Y. III: 214. (1835), Man. 533; Britt. Ill.  
Fl. I: 278.  
*Schoenus setaceus* Muhl. Gram. 6. (1817).  
Butte.
- CAREX** Virgilius Georg. III. 231. Linn. Sp. Pl. 972. (1753).  
*Xiphion* of greeks (?). *Thryon* Homer. Il. 381 (?). *Carectum*  
Vitruvius.

## ANALYTICAL KEY.\*

Achenes lenticular; stigmas two.

Lateral spikes short, sessile; staminate flowers at base or apex of spikes, or plants at times with heads dioecious or nearly so.

Rootstocks long, creeping, the culms 1—few together.....I

Culm cespitose, the rootstocks at most short creeping

Staminate flowers at top of spikes.....II

Staminate flowers at bottom of spikes.....III

Lateral spikes elongated, slender, peduncled, the terminal normally staminate.....IV

Achenes triangular; stigmas three

Perigynia pubescent.....V

Perigynia glabrous or tuberculate-hispid.....VI

## I.

Spikes 10 or less, distinct; sheaths hyaline opposite blades.

Heads not dioecious; styles short; perigynia short-beaked.

Leaf blades narrowly involute; rootstocks very slender, light brown.....1. *C. stenophylla*

Leaf blades 1.5–4 mm. wide, flat above; rootstocks stout, brownish black.....2. *C. camporum*

Heads dioecious; styles long; perigynia long-beaked.....3. *C. Douglasii*

Spikes very numerous, the upper closely aggregated; sheaths green striate opposite blades.....4. *C. Sartwellii*

## II.

Spikes not very numerous, in a simple head.

Perigynia deep green at maturity, the spikes all separate..5. *C. rosea radiata*

Perigynia yellowish, brownish or reddish at maturity; the upper spikes aggregated.

Perigynia not nerved on inner face and not prominently corky thickened at base.

Perigynia spreading at maturity, reddish tinged, 2.5 mm. wide.

6. *C. gravida*

Perigynia appressed at maturity, not reddish tinged, 1.25 mm. wide.....7. *C. Hookeriana*

Perigynia strongly nerved on inner face, corky thickened at base.....8. *C. stipata*

Spikes very numerous in a compound head.....9. *C. vulpinoidea*

## III.

Perigynia thin or wing margined.

Bracts leaf-like, many times exceeding head.

Perigynia subulate, the beak 2–3 times length of body

10. *C. synchnocephala*.

\* Shortly before this paper went to the printer, Mr. K. K. Mackenzie revised the species names and wrote this key.

- Perigynia ovate, the beak half length of body.....11. *C. athrostachya*.  
 Bracts not leaf-like, shorter than head.  
 Scales narrower and shorter than perigynia: the perigynia therefore  
 conspicuous in head.  
 Perigynia lanceolate, widely spreading; sterile shoots with  
 numerous widely spreading leaves.....12. *C. cristatella*.  
 Perigynia ovate, not widely spreading; sterile shoots with few  
 erect leaves.  
 Perigynia less than 4 mm. long.  
 Perigynia brownish; spikes closely aggregated, rounded  
 at base.....13. *C. Bebbii*.  
 Perigynia green; spikes widely separated, the upper clavate  
 at base.....14. *C. tenera*.  
 Perigynia more than 4 mm. long.....15. *C. brevior*.  
 Scales about as wide and as long as perigynia: the perigynia  
 therefore not conspicuous in head.  
 Heads stiff; spikes approximate.....16. *C. xerantica*.  
 Heads slender; spikes widely separate.....17. *C. praticola*.  
 Perigynia at most sharp-edged, thick.  
 Perigynia widely spreading, less than 3 mm. long.....18. *C. interior*.  
 Perigynia appressed, 5 mm. long....19. *C. Deweyana*.

## IV.

- Pistillate spikes very many flowered; perigynia green or straw-colored.  
 Lower leaves of fertile culms with long blades; perigynia not papillose;  
 culms smooth.....20. *C. aquatilis substricta*.  
 Lower leaves of fertile culms with much reduced blades or bladeless;  
 perigynia minutely papillose; culms rough.....21. *C. Emoryi*.  
 Pistillate spikes few-flowered; perigynia golden yellow at maturity.  
 22. *C. aurea*.

## V.

- Spikes solitary.  
 Spikes androgynous; scales with shining white margins; leaf blades  
 acicular.....23. *C. filifolia*.  
 Spikes dioecious; scales with dull white margins; leaf blades  
 flat.....24. *C. scirpiformis*.  
 Spikes several.  
 Pistillate spikes suborbicular, few-flowered; perigynia long-tapering  
 at base.  
 Mature perigynia 2mm. wide or more, the body circular in  
 cross-section.....25. *C. heliophila*.  
 Mature perigynia 1.5 mm. wide, the body round—triangular in  
 cross-section.....26. *C. pennsylvanica*.  
 Pistillate spikes oblong, many-flowered perigynia rounded at  
 base.....27. *C. lanuginosa*.

## VI.

- Perigynia with beak entire or obliquely cut at orifice.

Bracts with long closed sheaths.

Perigynia with minute beak.

Rootstocks slender, long-creeping; scales purplish.

Scales purplish tinged; perigynia obtusely triangular 28. *C. tetanica*.

Scales not purplish tinged; perigynia circular in cross-section.

29. *C. Crawei*.

Rootstocks densely caespitose; scales not purplish tinged.

30. *C. Shriveri*.

Perigynia long beaked.

Perigynia tuberculate-hispid; culms purple at base, not

fibrillose; spikes alternate flowered. 31. *C. assiniboinensis*.

Perigynia smooth; culms brown at base, strongly fibrillose;

spikes densely flowered. 32. *C. Sprengelii*.

Bracts sheathless.

Leaves pubescent; perigynia depressed at apex. 33. *C. abbreviata*.

Leaves glabrous; perigynia not depressed at apex. 34. *C. Parryana*.

Perigynia with bidentate beak.

Pistillate spikes 1 cm. long. 35. *C. viridula*.

Pistillate spikes 2.5-10 cm. long.

Perigynia with thick walls, the nerves thick; leaf-sheaths breaking and conspicuously filamentose.

Leaf-sheaths glabrous; perigynia teeth less than 2 mm. long

36. *C. laeviconica*

Leaf-sheaths soft hairy; perigynia teeth 2.5 mm. long or more

37. *C. atherodes*.

Perigynia with thin walls, the nerves slender; leaf-sheaths not filamentose.

Perigynia finely nerved; scales rough awned; spikes drooping.

38. *C. hystricina*.

Perigynia coarsely nerved; scales (except lower) not rough awned; spikes erect.

Perigynia not retrorse; spikes narrowly cylindric. 39. *C. rostrata*.

Lower perigynia retrorse; spikes oblong. 40. *C. retrorsa*.

213. *Carex stenophylla* Wahl. Kongl. Vet. Akad. Nya Handl. (II.) 24: 142. (1803).

Leeds, Pleasant Lake.

214. *Carex camporum* Mackenzie, Bull. Torr. Bot. Club 37: 244. (1910).

Leeds, Peninsula of Lake Ibsen, Thorne; Dickey Co (Brenckle).

215. *Carex Douglasii* Boott; Hook. Fl. Bor. Am. 2: 213 pl. 214. (1840).

Leeds, Pleasant Lake; Dickinson (Cl. Waldron).

216. *Carex Sartwellii* Dewey, Am. Journ. Sci. 43: 90. (1842).

Leeds.

217. *Carex rosea radiata* Dewey, Am. Journ. Sci. 10: 276. (1826).  
Pleasant Lake, Towner.
218. *Carex gravida* Bailey, Mem. Torr. Club I: 5. (1889).  
Devils Lake, Peninsula of Lake Ibsen.
219. *Carex Hookeriana* Dewey, Am. Journ. Sci. 29: 248 (1836).  
Butte, Pleasant Lake, Thorne.
220. *Carex stipata* Muhl. Willd. Sp. Pl. 4: 233. (1805).  
Pleasant Lake.
221. *Carex vulpinoidea* Michx. Fl. Bor. Am. 2: 169. (1803)  
Leeds, Oberon; Kulm (Brenckle).
222. *Carex sychnocephala* Carey, Am. Journ. Sci. (II.) 4: 24. (1847).  
Leeds (extinct), the dry bottom of Lake Ibsen.
223. *Carex athrostachya* Olney, Proc. Am. Acad. 8: 393 (1868).  
Peninsula of Lake Ibsen (only locality known east of the Rocky Mountains).
224. *Carex cristatella* Britton, Ill. Fl. U. S. and Canada, Vol. I. p. 357. (1896).  
Wahpeton (Bergman).
225. *Carex Bebbii* Olney; Bailey, Bot. Gaz. 10: 379. (1885).  
Leeds.
226. *Carex tenera* Dewey, Am. Journ. Sci. 8: 97. f. 9. (1824).  
Leeds, Peninsula of Lake Ibsen, Butte, Towner.
227. *Carex brevior* (Dewey) Mackenzie, in ed.  
*Carex straminea* var. *brevior* Dewey, Am. Journ. Sci. II: 158. (1826).  
Leeds, Butte, Towner, Minot; Kulm (Brenckle).
228. *Carex xerantica* Bailey, Coult. Bot. Gaz. 17: 151. (1892).  
Butte.
229. *Carex praticola* Rydb. Mem. N. Y. Bot. Gard. I: 84. (1900).  
Leeds, Peninsula of Lake Ibsen.
230. *Carex interior* Bailey, Bull. Torr. Bot. Club, 20: 426. (1893).  
Butte, Sheyenne, Towner.
231. *Carex Deweyana* Schwein. Ann. Lyc. N. Y. I: 65. (1824).  
Pleasant Lake, Turtle Mountains; Fargo (O. A. Stevens).



232. *Carex aquatilis substricta* Kükenthal, Pflanzenreich  
IV. 20: 309. (1909).  
Sheyenne.
233. *Carex Emoryi* Dewey, Bot. Mex. Bound. 330. (1858).  
Pleasant Lake, Towner, Minot.
234. *Carex aurea* Nutt. Gen. 2: 205 (1818).  
Devils Lake; Kulm (Brenckle); Dickinson (Cl. Waldron).
235. *Carex filifolia* Nutt. Gen. 2: 204. (1818).  
Butte, Towner.
236. *Carex scirpiformis* Mackenzie, Bull. Torr. Bot. Club  
35: 270. (1908).  
Between Rolette and Thorne (extinct).
237. *Carex heliophila* Mackenzie, Torrey, Vol. 13. No. 1.  
(1913).  
Leeds, Butte, Minot; Kulm (Brenckle).
238. *Carex pennsylvanica* Lam. Encycl. 3: 388. (1789).  
In woods: Devils Lake and Turtle Mountains.
239. *Carex lanuginosa* Michx. Fl. Bor. Am. 2: 175. (1803).  
Leeds, Butte, Willow City, Towner.
240. *Carex tetanica* Schkuhr. Riedgr. Nachtr. 68, figs. 100  
and 207. (1806).  
Leeds, Thorne, Sheyenne.
241. *Carex Crawei* Dewey, Am. Journ. Sci. (II.) 2: 246. (1846)  
Towner.
242. *Carex Shriveri* Britton, Manual 208. (1901).  
Butte.
243. *Carex assiniboinensis* W. Boott, Coult. Bot. Gaz. 9:  
91. (1884).  
Peninsula of Lake Ibsen, Towner.
244. *Carex Sprengelii* Dewey, Spreng. Syst. 3: 827. (1826).  
Peninsula of Lake Ibsen, Devils Lake, Pleasant Lake,  
Dunsieth.
245. *Carex abbreviata* Prescott; Boott, Trans. Linn. Soc.  
20: 141. (1846).  
Butte.
246. *Carex Parryana* Dewey, Am. Journ. Sci. 27: 239. (1835).  
Leeds (extinct), Towner.
247. *Carex viridula* Michx. Fl. Bor. Am. 2: 170. (1803).  
Sheyenne, Towner.
248. *Carex laeviconica* Dewey, Am. Journ. Sci. 24: 47, (1857).

Leeds, Towner, Minot; Mandan (Bergman).

249. *Carex atherodes* Spreng. Syst. 3: 828. (1826).

Leeds.

250. *Carex hystericina* Muhl., Willd. Sp. Pl. 4: 282. (1805).  
Pleasant Lake, Towner.

251. *Carex rostrata* Stokes, With. Arrang. Brit. Pl. (2 ed.)  
2: 1059. (1787).

252. *Carex rostrata* Stokes, var. *utriculata* (Boott.) Bailey,  
Proc. Am. Acad. 22: 67. (1886).

Leeds, Sheyenne, Towner.

253. *Carex retrorsa* Schwein, Ann. Lyc. N. Y. 1: 71. (1824).

Along Oak Creek at Bottineau; Renville Co.: Tolley (O.  
A. Stevens).

#### Order 10. LEMNALES.

Family 15. **LEMNADEAE** S. F. Gray, Nat. Arr. Br. Pl.  
II, p. 729. (1821).

*HYDROPHACE* Haller, Helv. 3: 68. (1768).

*Lemna* Dalechamps (1580), Linn. Syst. (1735), Gen. 325.  
(1737) and 417. (1754), Sp. Pl. 970. (1753), not *Lemna* or *Lemna*  
Theophr. = *Marsilea vulgaris* Linn.

254. *Hydrophace trisulca* (Linn.) Bubani, Fl. Pyr. IV,  
p. 23. (1901).

*Lemna triculca* Linn. Sp. Pl. 970 (1753).

Leeds, Butte..

255. *Hydrophace perpusilla* (Torr.) Lunell.

*Lemna perpusilla* Torr. Fl. N. Y. 2: 245. (1843).

Butte; Fargo (L. R. Waldron and F. F. Manns).

#### Order 11. AROIDEAE.

Jussieux Gen. Pl. 23. (1789). Bartling, Ord. Nat. Pl. 25. (1830).

Family 16. **ARACEAE** Necker, Act. Acad. Theod. Palate  
2: 462. (1770).

*ARISAEMA* Martius, Flora 14: 459. (1831).

*Arum* Linn. Syst. (1735), Gen. Pl. 277. (1737), 431. (1754),  
Sp. Pl. 964. (1753), in part.

256. *Arisaema triphyllum* (Linn.) Torr. Fl. N. Y. 2: 239.  
(1843).

*Arum triphyllum* Linn. Sp. Pl. 965. (1753). Fargo (Bergman).

#### Order 12. XYRIDALES.

Britton, Man. 2nd ed. p. 234. (1905).

Family 17. **COMMELYNEAE** R. Brown (1810).

*TRADESCANTIA* Linn. Syst. (1755); Gen. Pl. 98. (1737), 37. (1742), 38. (1754); Hort. Cliff. 126. (1737); Sp. Pl. 288. (1753); Van. Royen. Lugd. 37. (1740).

257. *Tradescantia ramifera* Lunell, Am. Midl. Nat. Vol. II: 124, (1911).

Sand Hills (McHenry Co.); Pleasant Lake.

258. *Tradescantia occidentalis* Britton, Rydb. Mem. N. Y. Bot. Gard. I: 87. (1900).

Fargo (Cl. Waldron).

Family 18. **PONTEREAE** H. B. K. Nov. Gen. et Sp. I: 265. (1815).

*HETERANTHERA* R. et P. Fl. Peruv. et Chil. Pr. 9. (1794).

259. *Heteranthera dubia* (Jacq.) McM., Met. Minn. p. 138. (1892).

Jamestown; Wahpeton (Bergman).

#### Order 13. **LILIALES.**

Britton, Man. 2nd ed. p. 244. (1905), in part.

Family 19. **JUNCOIDEAE** Gerard, Fl. Gall. Pr. p. 138. (1761).

*JUNCUS* Plinius, Hist. Nat. and all prae-Linnaean writers.

*Juncus* Tour. Éls. 212. (1694); I. R. H. 246. (1700); Linn. Syst. (1735), Gen. Pl. 104. (1737), 150. (1742), 152. (1754), Sp. Pl. 325. (1753).

260. *Juncus balticus* Willd. Berl. Mag. 3: 298. (1809).

Leeds.

261. *Juncus bufonius* Linn. Sp. Pl. 398. (1753).

Leeds, Jamestown.

262. *Juncus Vaseyi* Engelm. Trans. St. Louis Acad. 2: 448. (1866).

Butte.

263. *Juncus longistylis* Torr. Bot. Mex. Bound. 223. (1859).

Leeds, Butte, Pleasant Lake.

264. *Juncus nodosus* Linn. Sp. Pl. Ed. 2, 466. (1762).

Leeds, Butte, Towner.

265. *Juncus nodosus* var. *genuinus* Engelm.

Benson Co., acc. to specimen deposited in the Gray Herbarium by the writer in 1906.

266. *Juncus nodosus* var. *proliferus* Lunell. var. nov.

In locos florum folia substituta sunt. The flowers are replaced by tufts of leaves. In a cold bog among the species. Butte.

267. **Juncus Torreyi** Coville, Mem. Torr. Bot. Club, 22: 303. (1895).

Leeds, Butte.

268. **Juncus Torreyi** var. **proliferus** Lunell. var. nov.

In locos florum folia substituta sunt. The flowers are replaced by tufts of leaves. In a swamp among the species. Butte.

269. **Juncus brachycephalus** (Engelm.) Buchenau in Engler, Bot. Jahrb. 12: 268. (1890).

*Juncus canadensis* var. *brachycephalus* Engelm. Trans. St Louis Acad. 2: 474. (1868).

Towner, Fort Totten.

270. **Juncus Dudleyi** Wiegand, Bull. Torr. Bot. Club, 27: 524. (1900). **J. tenuis** Coult. in part, not Willd.

Leeds, Butte, Towner, St. John.

Family 20. **MELANTHACEAE** R. Br. Prodr. I: 272. (1810). **ANTICLEA** Kunth.

*Zygadenus* Michx. Fl. Bor. Am. I: 213. (1803), in part.

271. **Anticlea elegans** (Pursh) Rydb. Fl. of Colo. 76. (1906)

*Zygadenus elegans* Pursh. Fl. Am. Sept. 241. (1814).

Leeds, Butte, Thorne, Barton, Minot.

**OAKESIA** Wats.

272. **Oakesia sessilifolia** (Linn.) Wats. Proc. Am. Acad. 14: 269. (1879).

*Uvularia sessilifolia* Linn. Sp. Pl. 305. (1753).

Fargo (Bergman).

Family 21. **ALLIACEAE** Bartsch, also Dum. An. Fam. 61. (1829). **Cepaeae** Salisb. Gen. Pl. Lir. 88. (1866).

*Allieae* Kunth. Enum. Pl. 4, p. 379. (1843).

**CEPA** Virgilius Mov. 84. Columella. *Cepulla* Pall. Fil. ex. Oct. 11. *Krommuon* Theophr. VII: 14, Diosc. II: 181. *Cepa vulgaris* Bauhin Pin. II: 1, and of nearly all other writers. Onion of the ancients.

273. **Cepa rubens** Virgilius l. c.

*Allium Cepa* Linn. Sp. Pl. 294. (1753).

Probably escaped. Railroad ditch, Thorne.

**ALLIUM** (garlic of the ancients) Plinius, Tournef. Éls. Bot. p. 304. (1694). I. R. H. 383. (1700). Linn. Syst. (1735). Gen. 103. (1737), 141. (1742), 143. (1754). Royen, Hort. Lugd. 38. (1740), and prae-Linnaeans. *Allium sativum* Linn. Sp. Pl. 425. (1753) = garlic.

274. *Allium stellatum* Ker. Bot. Mag. Pl. 1576. (1813).  
Lees, Butte; Kulm (Brenckle).
275. *Allium Geyeri* S. Wats. Proc. Am. Acad. 14: 227. (1879).  
*Allium reticulatum deserticola* Jones (?).  
Pleasant Lake, Dunsieith, Towner, Minot.
276. *Allium reticulatum* Don. Mem. Vern. Soc. 6: 36. (1826-31).  
Leeds, Butte.
- Fam. 22. **LILIACEAE** Clusius, Panon 231. (1585). Linn.  
Phil. Bot. 28. (1751), 28. (1755); Zinn, Cat. Pl. Gott. 89. (1754);  
Haller, Enum. Pl. Hort. Gott. 19. (1753).
- LILIUM* Plinius, Virgilius, Colum. X: 99, Linn. Gen. Pl.  
91. (1737), 142. (1742), 143. (1754), Sp. Pl. 302. (1753).
277. *Lilium umbellatum* Pursh, Fl. Am. Sept. 229. (1814).  
*Lilium andinum* Nutt. Fras. Cat. (1813) nomen nudum.  
Leeds, Butte, Oberon.
278. *Lilium tigrinum* Andr. Bot. Rep. 9. (1809).  
Subspontaneous. Leeds.
- FRITILLARIA* Linn. Sp. Pl. 803. (1753).
279. *Fritillaria atropurpurea* Nutt. Journ. Acad. Phila. 7:  
54. (1834).  
Medora (Cl. Waldron).
- CALOCHORTUS* Pursh, Fl. Am. Sept. 240. (1814).
280. *Calochortus Nuttallii* T. et G. Pac. R. R. Rep. 2:  
124. (1855).  
Sentinel Butte (Bergman), Medora (Bergman).
- YUCCA* Linn. Sp. Pl. 319. (1753).
281. *Yucca glauca* Nutt. Fraser's Cat. (1813).  
Morton Co.: Wade (Bell).
- Family 23. **BACCIFERAE** Haller, Fl. Helv. 2: 116. (1768).  
*Convallariaceae* Link. Handb. I: 184. (1829).  
Subfamily *Asparagoideae* Vent. Tabl. 2: 141. (1799).
- ASPARAGUS* Diosc. 2: 151. Juvenalis, Sat. 5: 82, 9: 69,  
Theophr. Plinius, Fuchsius, Cordus, Tour. Éls.; I. R. H.; Linn.  
Syst., Hor'. Cliff., Gen., Sp. Pl. 313. (1753).
282. *Asparagus hortensis* Marcellus Virgilius, in Dios. Com.  
260. (1529).  
*Asparagus officinalis* Linn. Sp. Pl. 1. c.  
Leeds, Butte.
- Subfamily *Maianthemae* Dum. Fam. des Pl. 60. (1829).  
*VAGNERA* Adanson, Fam. des Pl. 2: 496. (1763).

- Smilacina* Desf. Ann. Mus. Paris 9: 51. (1807).
283. **Vagnera racemosa** (Linn.) Morong, Mem. Torr. Bot. Club 5: 114. (1894).
- Smilacina racemosa* Desf. l. c.; *Convallaria racemosa* Linn. Sp. Pl. 315. (1753).
- Fargo (Bergman).
- ASTERANTHEMUM** Kunth. Enum. Pl. V, p. 151. (1850).
- Vagnera* Adanson, l. c., segregate.
284. **Asteranthemum stellatum** (Linn.) Nwd. Am. Midl. Nat. Vol. III: 109. (1913).
- Convallaria stellata* Linn. Sp. Pl. 316. (1753).
- Smilacina stellata* Desf. Am. Mus. Paris 9: 52. (1807).
- Vagnera stellata* Morong, Mem. Torr. Club V: 114. (1894).
- Asteranthemum vulgare* Kunth l. c. p. 152
- Leeds, Butte, Devils Lake.
- UNIFOLIUM** Brunsvigius (1500), Tragus Stirp. Hist. (1552), Dodonaeus Pempt. 20. (1583), Adanson. Fam. Pl. 2: 54. (1763).
- Maianthemum* Wigg. Prim. Fl. Holsat. 14. (1780).
285. **Unifolium canadense** (Desf.) Greene, Bull. Torr. Bot. Club 15: 287. (1888).
- Maianthemum canadense* Desf. Ann. Mus. Paris 9: 54. (1807).
- Turtle Mountains: St. John, Dunsieith.
- Subfamily *Polygonateae* Benth. et Hook. Gen. III: 752. (1883).
- POLYGONATUM** Diosc. 4: 6. Tour. Éléments 69. (1694).
- Adanson, Fam. Pl. 2: 54. (1763).
- Salomonis* Heister, Syst. 5. (1748).
286. **Polygonatum commutatum** (R. et S.) Dietr.; Otto et Dietr. Garteng. 3: 223. (1835).
- Polygonatum giganteum* Dietr. l. c. 222. (1835).
- Convallaria commutata* R. et S. Syst. 7: 1671. (1830).
- Devils Lake, Peninsula of Lake Ibsen.
- DISPORUM** Salisb. Trans. Hort. Soc. I: 331. (1812).
- Prosartes* Don. Ann. Nat., Hist. 4: 341. (1840).
287. **Disporum trachycarpum** (S. Wats.) B. et H. Gen. Pl. 3: 832. (1883).
- Prosartes trachycarpa* S. Wats. Bot. King's Exp. 344. (1871).
- Turtle Mountains: St. John, Dunsieith.
- Family 24. **TRILLIACEAE** De Candolle Ess. Med. 294. (1816).
- TRILLIUM** Linn. Sp. Pl. 339. (1753), Gen. Pl. 158. (1754).

288. *Trillium cernuum* Linn. Sp. Pl. 339. (1753)  
 Fargo (Bergman). Turtle Mountains: St. John.  
 Family 25. **SMILACEAE** Vent. Tabl. Reg. Veg. 146. (1799).  
*NEMEXIA* Rafinesque, Neogenyton 3. (1825).  
*Smilax* Linn. Sp. Pl. 1028. (1753), in part.
289. *Nemexia lasioneuron* (Hook.) Rydb. Bull. Torr. Bot. Club (1905), p. 610.  
*Nemexia herbacea* (Linn.) Small, var *melica* A. Nels. Proc. Biol. Soc. Wash. 17: 175. (1904).  
 Souris River near Towner.
290. *Nemexia pulverulenta* (Michx.) Small in Fl. SE. U. S. 281. (1903).  
*Smilax pulverulenta* Michx. Fl. Bor. Am. 2: 238. (1803).  
 Peninsula of Lake Ibsen, Towner, Turtle Mountains.  
 Family 26. **HYPOXIDEAE** R. Brown. Fl. Voy. 277. (1814).  
*HYPOXIS* Linn. Syst. ed. 10, 2: 986. (1759).
291. *Hypoxis hirsuta* (Linn.) Coville. Mem. Torr. Bot. Club 5: 118. (1894).  
*Ornithogalum hirsutum* Linn. Sp. Pl. 306. (1753).  
*Hypoxis erecta* Linn. Syst. Ed. 10, 2: 986. (1759).  
 McHenry Co.: Sand Hills; Leeds, Butte.
- Order 14. ENSATAE.**
- Bartling Nat. Ord. p. 40. (1830).  
 Family 27. **IRIDEAE** Vent. Tabl. Reg. Veg. 188. (1799).  
*BERMUDIANA* Tournefort, Éléments 306. (1694); I. R. H. 387. (1700); Linn. Syst. (1735); Adanson, Fam. II: 60. (1763).  
*Sisyrinchium* Linn. Gen. 273. (1737), 436. (1742), 409. (1754), Sp. Pl. 954. (1753), not Tour. and older authors = *Iris*.
292. *Bermudiana angustifolia* (Mill.) Nwd. Am. Midl. Nat. Vol. III. p. 115. (1913).  
*Sisyrinchium angustifolium* Mill. Gard. Dict. ed. 7. (1759).  
 Leeds, and almost everywhere in the state.
293. *Bermudiana mucronata* (Michx.) Lunell.  
*Sisyrinchium mucronatum* Michx. Fl. Bor. Am. 2: 33. (1803).  
 Butte.
294. *Bermudiana septentrionalis* (Bicknell) Lunell.  
*Sisyrinchium septentrionale* Bicknell, Bull. Torr. Bot. Club 27: 243. (1900).  
 A Canadian plant. Leeds is the only locality from which it is known within the United States.

## Order 15. SYNANDRAE.

Agardh. Aphor. p. 179. (1823).

Family 28. **ORCHIDEAE** Haller, Enum. St. Helvet. I: 262. (1742).

Subfamily *Cypripedieae* Lindl. Orchid. Sal. 7-18. (1826).

**CALCEOLUS** (Rivinus) Tournefort, Éléments 343. (1694); I. R. H. 436. (1700); Zinn. Cat. 85. (1757); Adanson Fam. II: 70. (1763); *Calceolaria* Heister, Syst. 5. (1748); *Cypripedium* Linn. Syst. (1735). Gen. 272. (1737), 435. (1742), 408. (1754), Sp. Pl. 951. (1753).

295. **Calceolus hirsutus** (Miller) Nwd. Am. Midl. Nat. Vol. III. p. 118. (1913).

*Cypripedium hirsutum* P. Miller, Gard. Dict. Ed. 8, No. 3. (1763).

*Cypripedium pubescens* Willd. Sp. Pl. 4: 143. (1803).

Fort Totten (Bergman).

296. **Calceolus parviflorus** (Salisb.) Nwd. l. c.

*Cypripedium parviflorum* Salisb. Trans. Linn. Soc. 1: 77. (1791). Leeds, Pleasant Lake.

Subfamily *Ophrydeae* Lindley, Orchid. Scel. 96. (1826).

**ORCHIS** Theoph. Hist. 9: 19. Also Diosc. 3: 131, 132, Pliny 27. 8, 26: 10, as also of all older writers though often translated into Latin name. *Orchis* Tour. Élé. 343. (1694). I. R. H. 431. (1700) Linn. Syst., (1735) Gen. 270 (1737), 405 (1754).

297. **Orchis rotundifolia** Pursh, Fl. Am. Sept. 588. (1814).

*Platanthera rotundifolia* Lindl. Gen. & Sp. Orch. 292. (1835).

Devils Lake, fide M. U. Brannon.

**LIMNORCHIS** Rydb., Mem. N. Y. Bot. Gard. I: 105. (1900).

*Habenaria* Willd.: Sp. Pl. 4: 44. (1805).

298. **Limnorchis hyperborea** (Linn.) Rydb. l. c.

*Habenaria hyperborea* (Linn.) R. Br. Ait. Hort. Kew. ed. 2, 5: 193. (1813).

*Orchis hyperborea* Linn. Mant. 121. (1767).

Butte, Pleasant Lake, Dunsieith, Willow City.

**COELOGLOSSUM** Hartman, Handb. Skand. Fl. I: 329. (1820).

*Habenaria* Willd. l. c., segregate.

299. **Coeloglossum bracteatum** (Willd.) Part. Fl. Ital. III: 409.

*Habenaria bracteata* (Willd.) R. Br. Ait. Hort. Kew. l. c. 192.

*Orchis bracteata* Willd. Sp. Pl. 4: 34. (1805).



Butte; Turtle Mountains.

Subfamily *Neottiinae* Pfitz. Entw. Anord. Orch. 45. 97. (1887).

*TRIORCHIS* Bauhin, Phytopinax 123. (1596); Gerard, Herbal (1597); C. Bauhin, Pinax 84. (1623); Tabernaemontanus. *Gyrostachys* Pers. Syn. II: 511. (1807). *Ibidium* Salsb., Trans. Hort. Soc. 1: 291. (1812). *Spiranthes* L. C. Richard Mem. Mus. Paris 4: 42. (1818).

300. *Triorchis stricta* (Rydb.) Lunell.

*Gyrostachys stricta* Rydb. Mem. N. Y. Bot. Gard. 1: 107. (1900).

Leeds (extinct), Butte (extinct), Towner, Devils Lake.

Subfamily *Liparididae* Lindl. Veg. King. 181. (1847).

*CORALLORHIZA* Ruppius, Fl. Jen. (1718); R. Br. Ait. Hort. Kew. ed. 2, 5: 209. (1813); Gmel. Fl. Sib. I, op. 25. (1747); Haller, Hist. Stirp. Indig. Helv. 11: 159. (1768), also 248. (1742).

301. *Corallorhiza trifida* Chat.

*Ophrys Corallorhiza* Linn. Sp. Pl. 945. (1753).

*Corallorhiza innata* R. Br. l. c.

*Corallorhiza Corallorhiza* (Linn.) Karst. Deutsch. Fl. 448. (1880-83).

Pleasant Lake.

#### CORRECTIONS.

Page 221, lines 7 and 8: for *ciliare* . . . *ciliaris* read *cilianense* . . . *cilianensis*.

Page 224, line 14: *Gnomonia* is not valid, being antedated by *Gnomonia*, genus name of a fungus. Substitute *HOROLOGION* (gr. ὁρολόγιον, fescue, dial).

### THE NAIADES OF MISSOURI.—IV.

BY WILLIAM I. UTTERBACK.

**Uniomerus tetralasmus** (Say).

("Pond Horn Shell.")

Pl. XXI, Figs. 69 A and B.

1830—*Unio tetralasmus* Say, Am. Conch., III, pl. XXIII.

1836—*Unio declivis* Conrad, Monog., V, p. 45, pl. XXIII, fig. 1.

1839—*Unio sayi* Ward, (in Tappan). Am. Jl. Sci., XXXV, p. 268, pl. III, fig. 1.